



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/702,421	11/05/2003	Luca Farinola	P00018US1B	8337

7590 07/13/2005

Michael R. Huber
Bridgestone Americas Holding, Inc.
1200 Firestone Parkway
Akron, OH 44317

EXAMINER

KNABLE, GEOFFREY L

ART UNIT	PAPER NUMBER
----------	--------------

1733

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/702,421

Applicant(s)

FARINOLA, LUCA

Examiner

Geoffrey L. Knable

Art Unit

1733

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1733

1. Claims 1-5 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In claim 1, line 17, the reference to the carcass plies being applied over "*at least a portion*" of side wall strips was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, i.e. it is considered to be new matter. It is noted that this claim language, although originally filed with this divisional application, does not appear to have original descriptive support in the parent application.

2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 11, no antecedent has been established for "the first diameter".

In claim 1, line 18, the reference to "diameter " followed by the D1 or D2 in parentheses renders the claim indefinite as the material in parentheses appears to be needed to understand the claim scope whereas material in parentheses (as for example a reference numeral) is normally not read as a limitation into the claim. It would appear that these should be more clearly referenced in a manner that does not rely upon the

Art Unit: 1733

matter in parentheses as for example "first" and "second" diameters (i.e. here as well as anywhere else within the claims, such as claim 1, line 11, where these are referenced).

In claim 2, no antecedent has been established for "the *second* diameter."

Also, it is not clear how claim 2 further limits claim 1, it being noted that claim 1 seems to already define the apparent second diameter in essentially the same manner as defined in claim 2.

In claim 3, no antecedent has been established for "said first and second diameters" Also, as in claim 1, this claim relies upon material between parentheses (note esp. the "and" separating the two diameters D1 and D2) whereas such material is not normally read into a claim as a limitation.

In claim 4, no antecedent has been established for "said second diameter". Also, it is noted that this claim seems to be defining this diameter differently than claim 1 since claim 1 would include the tubular body as well as the bladders in defining this diameter whereas claim 4 references this as a diameter of only the tubular body - an ambiguity is therefore raised by this inconsistency.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over [Enders (US 4,214,939) or Kortman (US 4,243,451) or Agawa (US 5,564,845)] taken in view of Vanderzee (US 4,229,246) and Becker et al. (US 5,591,288).

Enders (esp. col. 7, line 48 - col. 8, line 16 and figures) and Kortman (note esp. col. 6, line 63 - col. 7, line 16 and figures) are exemplary of well known single stage tire building processes including applying an innerliner, chafers (i.e. abrasion strips), sidewalls and carcass plies to a drum that includes a fixed central body (e.g. 38 in Enders; 30 in Kortman) and two half-drums that each clearly include an expandable bead clamping device. A pair of turn-up bladders (48/49 in Enders; 22/73 in Kortman) are also provided and would clearly support the applied sidewalls. These references therefore suggest a process as claimed except they do not suggest the claimed step of adjusting the diameter of the drum sides relative to the center so the carcass plies lie substantially flat when applied over the innerliner/abrasion strip/sidewalls.

However, it is submitted that the ordinary artisan in this art would have been motivated to provide a reduced diameter at the sides of a drum in the turn-up area selected to accommodate thicker carcass materials that are first applied in these areas, this having the expected benefit of allowing the built up material to remain cylindrical and flat and thereby better allow beads to be set as well as better allow stitching of subsequent material – note esp. fig. 4 and col. 7, line 28 – col. 8, line 4 of Vanderzee as well as col. 1, lines 27-34 and col. 3, lines 1-29 of Becker et al. To modify the conventional single stage processing evidenced by Enders or Kortman to include provision of a selected diameter difference to accommodate initially applied materials (esp. sidewalls, which as is well known, are applied at the sides over the turn-up bladders) and thereby provide a flat surface for the carcass plies would therefore have been obvious.

As to claim 2, the references suggest two bladders as claimed as already noted. As to claim 3, it is also considered obvious to select or determine an appropriate diameter difference to accommodate initially applied materials in order to allow beads to be set as well as to allow better stitching of a flat cylindrical carcass through only routine optimization based upon the dimensions of these initially applied materials, the claimed values being further considered to represent known and conventional values for known and conventional initial rubber carcass components (e.g. sidewalls) for known and conventional tires. As to claim 4, if the drum is made to accommodate thick sidewall material, it would have been readily apparent to the artisan that a flange adjacent the bead locks (e.g. 57/107 in Enders) would or should be at a greater diameter than the sides of the drum in order to accommodate the sidewall components. As to claim 5, both Enders and Kortman clearly place and lock the beads as claimed. A combination tire/unistage drum as required by claim 6 is likewise considered obvious for the reasons advanced with respect to claim 1 above.

As an alternative grounds of rejection, Agawa provides a similar disclosure to Enders and Kortman and in fact also illustrates smaller diameter drum sides apparently to accommodate the sidewalls (e.g. fig. 1) although there is no explicit discussion thereof and there is no explicit mention of chafers/abrasion strips or the specific construction of the turn-up means. It however is submitted that the ordinary artisan would have understood the need for abrasion strips for any tire (i.e. to account for rim abrasion at the beads) and been motivated to include such adjacent the bead clamping devices as claimed. Note also Vanderzee evidences the conventional nature of such

Art Unit: 1733

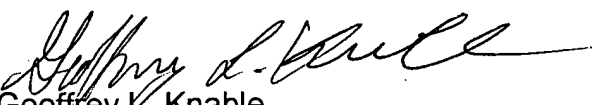
strips. Likewise, effecting turn-up using bladder pairs is extremely well known, conventional and obvious in this art. As to providing the diameters so as to provide a flat surface, it would seem that arguably the illustrated surface in fig. 1 would be "substantially flat". Further, and in any event, for the reasons noted above in light of Vanderzee and Becker et al., it is submitted that the ordinary artisan in this art would have been motivated to provide the reduced diameter at the sides of the drum in the turn-up area selected to accommodate thicker carcass materials (e.g. sidewalls) that are first applied in these areas, this having the expected benefit of allowing the built up material to remain cylindrical and flat and thereby better allow beads to be set as well as better allow stitching of subsequent material – note esp. fig. 4 and col. 7, line 28 – col. 8, line 4 of Vanderzee as well as col. 1, lines 27-34 and col. 3, lines 1-29 of Becker et al.

5. Applicant cannot rely upon the foreign priority papers to overcome the rejection based upon Agawa (US 5,564,845) because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on 571-272-1156. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
July 9, 2005